**Hard to start**

Check the throttle valve is open or not

Yes

No

Open it

Check the diesel indicator is on or not

Yes

Add sufficient diesel

Light still on

Remove the control panel. Disconnect the diesel alerter.

No

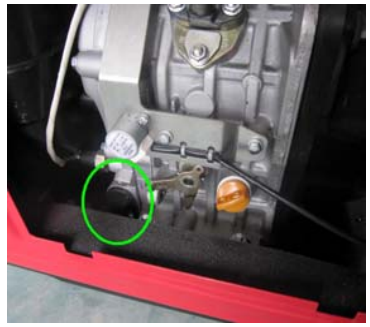
Check the oil indicator is on or not

Yes

Add sufficient oil

Light still on

Check for the clogged fuel filter



Clogged

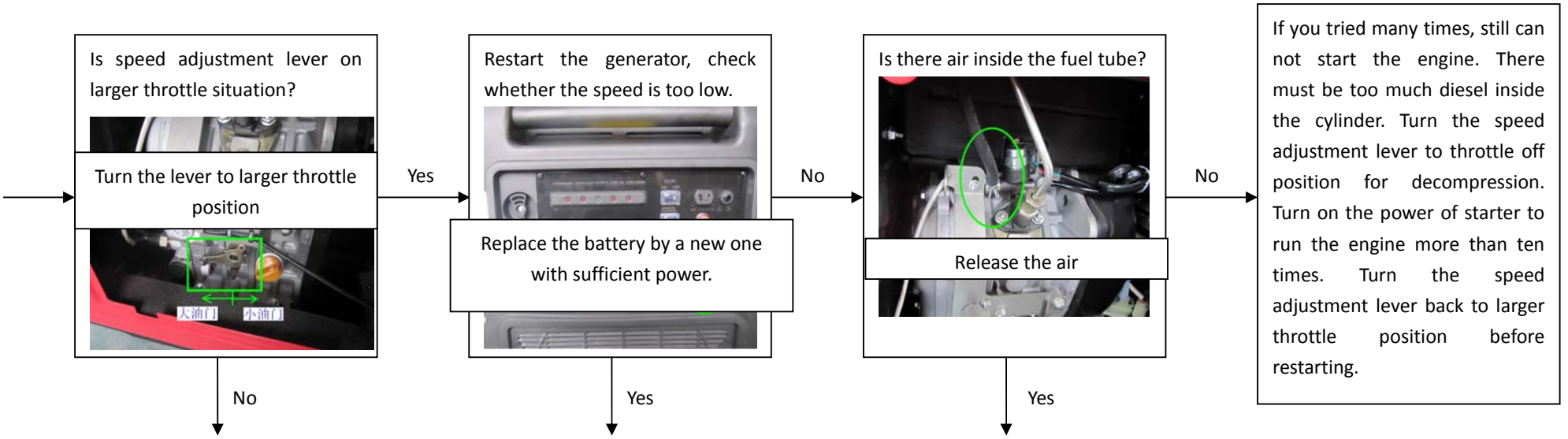
Clean or replace the oil filter

No

Check whether the oil is too sticky or not., if it is cold season.

Yes

Change oil according to user manual


Is speed adjustment lever on larger throttle situation?
Turn the lever to larger throttle position
大油门
小油门
Yes
No
Restart the generator, check whether the speed is too low.
Replace the battery by a new one with sufficient power.
Yes
No
Is there air inside the fuel tube?
Release the air
Yes
No
If you tried many times, still can not start the engine. There must be too much diesel inside the cylinder. Turn the speed adjustment lever to throttle off position for decompression. Turn on the power of starter to run the engine more than ten times. Turn the speed adjustment lever back to larger throttle position before restarting.

**Steps for releasing the air in the fuel tube**

1. Add sufficient fuel into the tank.
2. Loose the two nuts on left overhaul cover and remove the cover.
3. Take off the inlet tube from the magnetic valve and open the fuel valve. Re-put the inlet tube back onto the magnetic valve quickly as soon as there is fuel come out from the tube.
4. Restart the generator according to the user manual.

**Stop automatically**

Is the fuel indicator light on?

No

Is the oil indicator light on?

No

Open the air filter to check whether the filter is clogged.

No

Take off the inlet tube on the injection pump to check whether fuel flow out.

Yes

No

Check and clean the tube, fuel valve, fuel filter. Replace them if necessary.

Yes

Add sufficient fuel

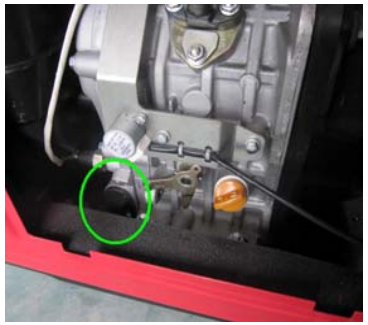
Light still on

Remove the control panel. Disconnect the diesel alerter.

Add sufficient oil

Light still on

Check for the clogged fuel filter



Yes

Reconnect the injection pump; high pressure fuel tube and injector after disassemble the injector. Tighten the nuts on high pressure tube. Restart the engine to see how the injector works.

Normal

Loose the nuts on high pressure side of injection pump. Restart the engine to see whether the pump work normally.

Abnormal

Check whether the circuit of magnetic valve is open. Or maybe it is poor contacted.

Circuit problem

Connect it

Clogged

Clean or replace the filter.

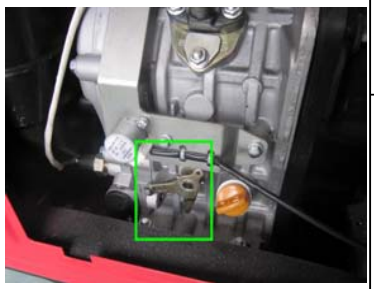
Check whether the four fuel injection hole works normally.

Abnormal

Replace the injector.

**Engine racing**

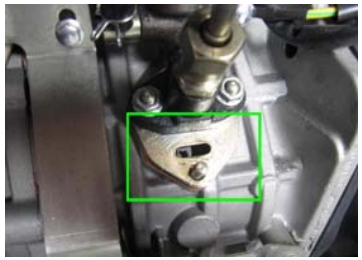
Turn the speed adjustment lever to check whether the gear of injection pump is stuck.



Stuck → Troubleshooting

Not stuck →

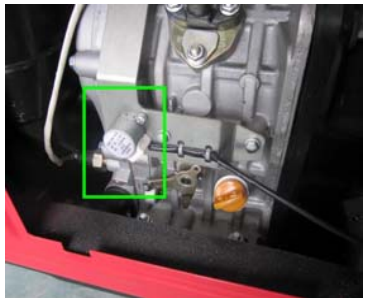
Disassemble the cover of injection pump to check whether the gear rack and shift fork are normal.



Abnormal → Troubleshooting

Normal →

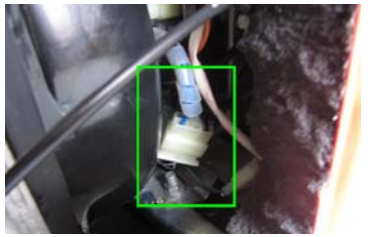
Check whether the step motor is normal.



Abnormal → Replace it

Normal →

Disconnect the 6P connector from the inverter unit. Start the engine and check the two wires from stator for short circuit.



Normal → Replace the stator

Abnormal → Replace the inverter

**No AC output**

Check whether the switch of short circuit protector is OFF.

OFF → Turn it on

ON → Is the overload light on?

Yes → Restart the engine to see whether the light is on or not after five minutes break.

No → Remove the control panel to see whether the circuit and clips inside are all well connected.

No → Repair or replace the parts

OK → Turn on and off the smart switch to see whether the speed changes or not.

No difference → Replace the inverter

Changes

Start the engine after disconnects the 6P pin on the inverter. Test whether there is voltage exists between three black wires of the stator.

No voltage → Replace the stator

**No DC output**

Check whether the switch of short circuit protector of DC is OFF.

On

Restart the engine after remove the control panel. Check whether there is DC voltage exists on DC socket, DC protector, connecting pins by DC ammeter.

Exist

Open the case and take off the DC input that on voltage stabilizer. Start the engine to measure whether there is AC voltage exists.

Exist

Is the voltage stabilizer well connected?

Off

Push it on

No DC voltage

Find the part between no voltage and with voltage. Repair or replace it.

No

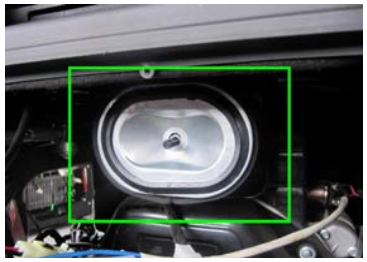
Replace the stator

Yes

Replace the voltage stabilizer.

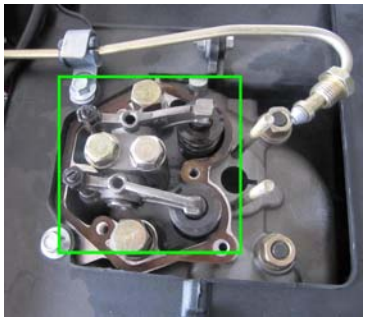
**LOW AC OUTPUT**

Open the air filter to see whether the filter element is clogged or not.



Not clogged

Is the valve clearance too wide?



Normal

Check the engine to see whether the air valve blow-by gas, whether the piston ring is worn out, whether the cylinder is worn out.

Abnormal

Repair or replace the damaged part

Clogged

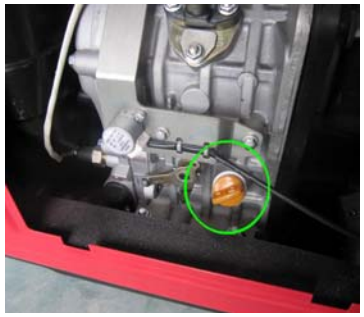
Clean or replace the element.

Too wide

Adjust the clearance

**Oil alert light is blinking. Engine speed does not stabilize or stall. Fume sometimes.**

Check the oil level in the engine.



Sufficient oil

Remove the maintenance cover and disconnect the circuit of oil alarm system to check whether it works normally.

Normal

Recheck the system after clean or replace the oil filter.

Abnormal

Recheck the system after replace the oil alert

Abnormal

Low

Add sufficient oil

Abnormal

Perform the indicator system troubleshooting.

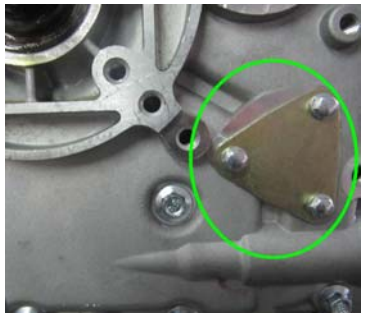
OK

Clean or replace the filter element periodically according to the user manual

OK

Found the problem.

Disassemble the oil pump to see whether it is damaged.



Not damaged

Disassemble the engine and clean it.

Damaged

Replace the oil pump